



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/706,917

11/14/2003

Weixin Gu

086142-0581

7666

22428

7590

09/13/2006

FOLEY AND LARDNER LLP
SUITE 500
3000 K STREET NW
WASHINGTON, DC 20007

EXAMINER

GOODEN JR, BARRY J

ART UNIT

PAPER NUMBER

3616

DATE MAILED: 09/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/706,917

Applicant(s)

GU ET AL.

Examiner

Barry J. Gooden Jr.

Art Unit

3616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 10-12, 16, 21 and 22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 13-15 and 17-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to the amendment filed June 27, 2006. Currently claims 1-22 are pending; claims 10-12, 16, 21, and 22 are withdrawn; and claims 1, 6, 14, 17, 18, and 20 are amended.

Specification

1. The disclosure is objected to because of the following informalities:

The use of the term "cell" is objected to see Item 3 of office action.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 8, 13, 19, and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regards to claims 8, 13, 19, and 20, Applicant's use of the term "cell" is unclear. A cell is defined as an "enclosed cavity". Applicant shows in Figures 2-4 what appears to be a "cell"; however as seen in Figure 1, what Applicant refers to, as a cell, is a section view of a passage.

Applicant has further defined a cell as, "any of various small compartments or bounded areas forming part of a whole". Examiner maintains that this definition diverges from the applicant's usage of the word "cell".

Claim Rejections - 35 USC § 102

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Art Unit: 3616

5. Claims 1-7, 9, 14, 15, 17, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Staub et al., US Patent 6,059,312.

In regards to claims 1-7, 9, 14, 15, 17, and 18, Staub et al. shows all of the claimed elements including a head-protecting airbag comprising:

a primary chamber (20); a secondary chamber (18);

wherein the primary chamber (20) is separated from the secondary chamber (18) by an air-permeable panel (6);

wherein the air-permeable panel (6) is configured so that air flows through the surfaces of the air-permeable panel (6) that face the primary (20) and secondary chambers (18); and

wherein at least one of the primary chamber (20) and the secondary chamber (18) comprises a first panel (4), wherein the air permeable panel (6) has substantially the same shape as the first panel (4)

wherein the head-protecting airbag is configured to be inflatable over an in-vehicle lateral surface;

wherein the primary chamber (20) is configured to be inflated by gas discharged from a gas generator (12);

wherein the secondary chamber (18) is configured to be inflated by gas transferred from the primary chamber (20);

wherein the secondary chamber (20) is configured to be inflated by gas passing through the air-permeable panel (6);

further comprising:

a second panel (2);

wherein the air-permeable panel (6) is disposed between the first panel (4) and the second panel (2);

wherein the primary chamber (20) is defined by the first panel (4) and the air-permeable panel (6);

wherein the secondary chamber (18) is defined by the second panel (2) and the air-permeable panel (6);

Art Unit: 3616

wherein the first panel (4) is adjacent to a vehicle body and a second panel (2) adjacent to a vehicle cabin;

wherein the air permeable panel (6) is connected to the first panel (4) and the second panel (2) to thereby form the primary chamber (20) and the secondary chamber (18) (See Figure 1).

In regards to claim 17, Staub et al. shows all of the claimed elements including a head-protecting airbag device comprising:

an airbag, wherein the airbag includes a primary chamber (20), a secondary chamber (18), and an air-permeable panel (6) separating the primary chamber (20) and the secondary chamber (18); and,

a gas generating apparatus (12) configured to generate gas to inflate the airbag;

wherein the air-permeable panel (6) is configured so that air flows through the surfaces of the air-permeable panel (6) that face the primary (20) and secondary (18) chambers; and,

wherein at least one of the primary (20) chamber and the secondary (18) chamber comprises a first panel (4), wherein the air permeable panel (6) has substantially the same shape as the first panel (4).

In regards to claim 18, Staub et al. shows all of the claimed elements including an airbag for a vehicle comprising:

a cabin side panel (2);

a body side panel (4); and

an air permeable panel (6) positioned between the cabin side panel (2) and the body side panel (4) to thereby form a primary chamber (20) bounded by the body side panel (4) and the air permeable panel (6) and a secondary chamber (18) bounded by the cabin side panel (2) and the air permeable panel (6);

wherein the air-permeable panel (6) is configured so that air flows through the surfaces of the air-permeable panel (6) that face the primary (20) and secondary (18) chambers; and,

wherein the air permeable panel (6) has substantially the same shape as at least one of the cabin side panel (2) and the body side panel (4).

6. Claims 1-5 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Lachat et al., US Patent 5,791,685.

In regards to claims 1-5 and 17, Lachat et al. shows all of the claimed elements including a head-protecting airbag (22) comprising:

a primary chamber (54); a secondary chamber (52);

wherein the primary chamber (54) is separated from the secondary chamber (52) by an air-permeable panel (56a);

wherein the air-permeable panel (56a) is configured so that air flows through the surfaces of the air-permeable panel (56a) that face the primary (54) and secondary chambers (52); and

wherein at least one of the primary chamber (54) and the secondary chamber (52) comprises a first panel (56b), wherein the air permeable panel (56a) has substantially the same shape as the first panel (56b);

wherein the head-protecting airbag (22) is configured to be inflatable over an in-vehicle lateral surface (Abstract);

wherein the primary chamber (54) is configured to be inflated by gas discharged from a gas generator (100);

wherein the secondary chamber (52) is configured to be inflated by gas transferred from the primary chamber (54);

wherein the secondary chamber (52) is configured to be inflated by gas passing through the air-permeable panel (56a);

In regards to claim 17, Lachat et al. shows all of the claimed elements including a head-protecting airbag (22) device comprising:

an airbag (22), wherein the airbag (22) includes a primary chamber (54), a secondary chamber (52), and an air-permeable panel (56a) separating the primary chamber (54) and the secondary chamber (52); and,

Art Unit: 3616

a gas generating apparatus (10) configured to generate gas to inflate the airbag (22);

wherein the air-permeable panel (56a) is configured so that air flows through the surfaces of the air-permeable panel (56a) that face the primary (54) and secondary chambers (52); and

wherein at least one of the primary chamber (54) and the secondary chamber (52) comprises a first panel (56b), wherein the air permeable panel (56a) has substantially the same shape as the first panel (56b).

7. Claims 1-9, 13-15, 17-19, and 20, as best understood, are rejected under 35 U.S.C. 102(e) as being anticipated by Abe et al., US Publication 2004/0145162 A1.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

In regards to claims 1-9 and 13-15, as best understood, Abe et al. shows all of the claimed elements including a head-protecting airbag (10B) comprising:

a primary chamber (4,6); a secondary chamber (5);

wherein the primary chamber (4,6) is separated from the secondary chamber (5) by an air-permeable panel (54);

wherein the air-permeable panel (54) is configured so that air flows through the surfaces of the air-permeable panel (54) that face the primary (4,6) and secondary chambers (5); and

wherein at least one of the primary chamber (4,6) and the secondary chamber (5) comprises a first panel (12), wherein the air permeable panel (54) has substantially the same shape as the first panel (12);

wherein the head-protecting airbag (10B) is configured to be inflatable over an in-vehicle lateral surface;

Art Unit: 3616

wherein the primary chamber (4,6) is configured to be inflated by gas discharged from a gas generator (60);

wherein the secondary chamber (5) is configured to be inflated by gas transferred from the primary chamber (4,6);

wherein the secondary chamber (5) is configured to be inflated by gas passing through the air-permeable panel (54);

further comprising:

a first panel (14); a second panel (12);

wherein the air-permeable panel (54) is disposed between the first panel (14) and the second panel (12);

wherein the primary chamber (4,6) is defined by the first panel (14) and the air-permeable panel (54);

wherein the primary chamber (4,6) includes a pair of cells (4 and 6) formed by a connection between the air permeable panel (54) and the first panel (14) (See Figure 5);

wherein the secondary chamber (5) is defined by the second panel (12) and the air-permeable panel (54);

wherein the primary chamber (4,6) is defined by the first panel (14) and the air permeable panel (54) and the secondary chamber (5) is defined by the second panel (12) and the air permeable panel (54);

wherein the air permeable panel (54) includes a periphery portion and an interior portion; and

wherein a portion of the interior portion of the air-permeable panel (54) is connected to the first panel (14) to thereby form a pair of cells (4 and 6);

further comprising a first panel (14) adjacent to a vehicle body and a second panel (12) adjacent to a vehicle cabin;

wherein the air permeable panel (54) is connected to the first panel (14) and the second panel (12) to thereby form the primary chamber (4,6) and the secondary chamber (5) (See Figure 5).

Art Unit: 3616

In regards to claim 17, Abe et al. shows all of the claimed elements including a head-protecting airbag (10B) device comprising:

an airbag (10B), wherein the airbag (10B) includes a primary chamber (4,6), a secondary chamber (5), and an air-permeable panel (54) separating the primary chamber (4,6) and the secondary chamber (5); and,

a gas generating apparatus (60) configured to generate gas to inflate the airbag (10B);

wherein the air-permeable panel (54) is configured so that air flows through the surfaces of the air-permeable panel (54) that face the primary (4,6) and secondary chambers (5); and

wherein at least one of the primary chamber (4,6) and the secondary chamber (5) comprises a first panel (12), wherein the air permeable panel (54) has substantially the same shape as the first panel (12).

In regards to claims 18 and 19, as best understood, Abe et al. shows all of the claimed elements including an airbag (10B) for a vehicle comprising:

a cabin side panel (12);

a body side panel (14); and

an air permeable panel (54) positioned between the cabin side panel (12) and the body side panel (14) to thereby form a primary chamber (4,6) bounded by the body side panel (14) and the air permeable panel (54) and a secondary chamber (5) bounded by the cabin side panel (12) and the air permeable panel (54);

wherein the air-permeable panel (54) is configured so that air flows through the surfaces of the air-permeable panel (54) that face the primary (4,6) and the secondary (5) chambers; and

wherein the air-permeable panel (54) has substantially the same shape as at least one of the cabin side panel (12) and the body side panel (14);

wherein the primary chamber (4,6) includes a pair of cells (4 and 6) separated by a connection between the air permeable panel (54) and the body side panel (14).

Art Unit: 3616

In regards to claim 20, as best understood, Abe et al. shows all of the claimed elements including an airbag (10B) for a vehicle comprising:

a cabin side panel (12);

a body side panel (14); and

an air permeable panel (54) positioned between the cabin side panel (12) and the body side panel (14) to thereby form a primary chamber (4,6) bounded by the body side panel (14) and the air permeable panel (54) and a secondary chamber (5) bounded by the cabin side panel (12) and the air permeable panel (54);

wherein the primary chamber (4,6) includes a pair of cells separated by a connection between the air permeable panel (54) and the body side panel (14).

Examiner notes the rejection of claim 20 is due to the applicant's amendment to overcome a previous 112, 2nd objection. Previously applicant was claiming subject matter drawn to an embodiment seen in Figures 4(a) and 4(b); however applicant has now amended to claim subject matter drawn to an embodiment seen in Figures 2(a), 2(b) and 3. As such the rejection of claim 20 is proper and the action will be made final.

Response to Arguments

8. Applicant's arguments filed 6/27/2006 have been fully considered but they are not persuasive.

Examiner maintains the term "cell" is improperly utilized. Applicant does not disclose a cell within an airbag; rather applicant discloses a cross-section of path through the airbag.

Examiner maintains that Staub et al. discloses an air-permeable panel being configured so that air flows through the surfaces of the air-permeable panel. Examiner notes that hole 16, of Staub et al., extends from one surface to the other surface, through the depth of, the air-permeable panel.

Examiner maintains that Lachat et al. discloses an air-permeable panel being configured so that air flows through the surfaces of the air-permeable panel. Examiner notes that hole 58, of Lachat et al., extends from one surface to the other surface, through the depth of, the air-permeable panel.

Examiner maintains that Abe et al. discloses an air-permeable panel being configured so that air flows through the surfaces of the air-permeable panel. Examiner notes that hole 54a, of Abe et al., extends from one surface to the other surface, through the depth of, the air-permeable panel.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

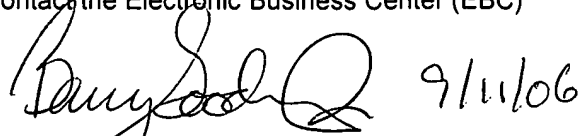
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barry J. Gooden Jr. whose telephone number is (571) 272-5135. The examiner can normally be reached on Monday-Friday 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul N. Dickson can be reached on (571) 272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

Art Unit: 3616

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC)
at 866-217-9197 (toll-free).



Barry J. Gooden Jr.
Examiner
Art Unit 3616

BJG



ERIC CULBRETH
PRIMARY EXAMINER